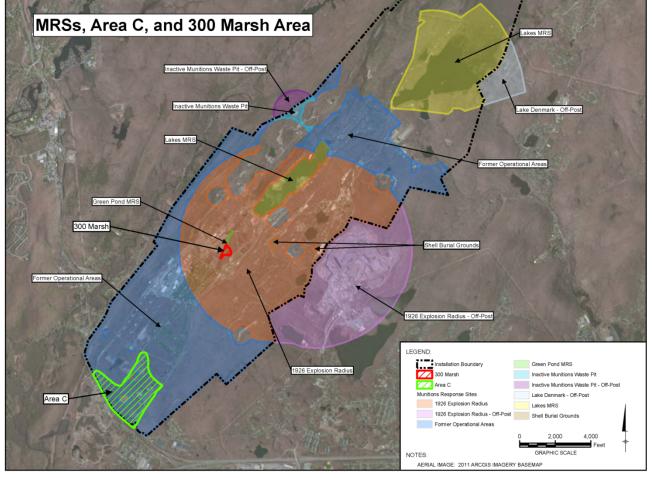


## Area C Location





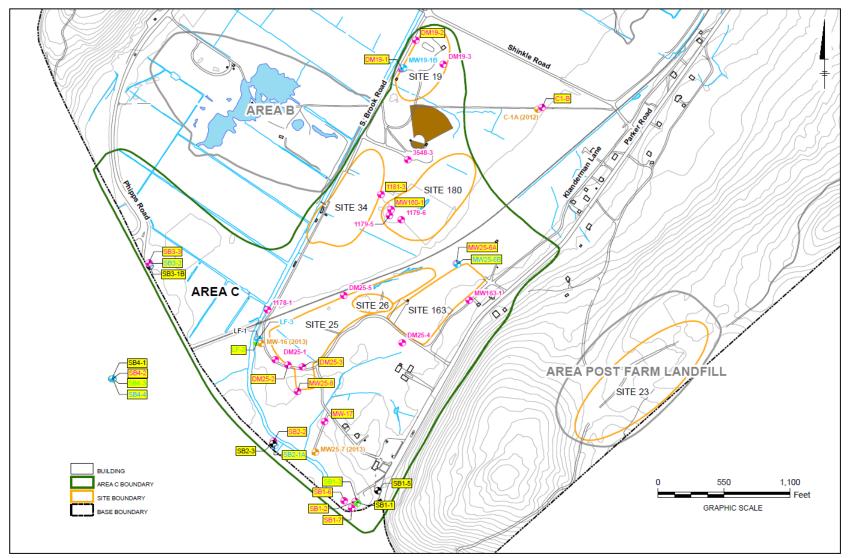




# Area C LTM Program



Picatinny Arsenal, NJ





- Area C: IRP Site PICA-206.
- ROD signed September 2009; Long term monitoring (LTM) and Land Use Controls (LUC) implemented.
- 2010–2013: Annual inspections and semi-annual groundwater monitoring.
- 2011-2013: Statistical evaluations.
- 2013-2016: Inspection, monitoring and reporting to continue.



- Contaminant History
  - VOCs
  - Metals
  - RDX
- LTM Program Exit Strategy
  - Statistical evaluations: re-evaluate monitoring frequency.
  - Remove COCs consistently below Levels of Concern (LOCs).
  - Decommission wells with no COC exceedances above LOC.
- Three statistical evaluations completed; fourth ongoing.



#### **Area C LTM: Status**



- Activities To Date
  - 7 semi-annual monitoring events, 3 statistical evaluations.
  - 4 monitoring wells, numerous analytes removed from program.
- Remaining Analytes
  - Metals: Arsenic, Lead, Nickel, Thallium.
  - VOCs: Vinyl Chloride.
- Conclusions
  - Majority of well/analyte pairs show significant decline or are consistent.
  - Remedy functioning as anticipated.



### **Area C Lead**



SB1-1 and SB1-2 indicate lead slightly above LOC; NJDEP requested additional source investigation.

- Filtered and unfiltered samples collected during recent LTM sampling
  - Unfiltered samples exceeded LOC.
  - Filtered samples less than LOC.
- Conclusions
  - Lead in groundwater associated with suspended particles.
  - Suspended particles sufficiently coarse they are effectively non-transportable (Bailey et al., 2005).



#### **Area C LTM: Future Work**



#### No Specific Monitoring End Date

- LTM Modifications based on 5-Year Reviews
  - Re-evaluate site conditions
  - Perform statistical evaluation; results used to modify or abandon LTM
  - LTM can be discontinued if:
    - Contaminants not migrating off-site
    - Contaminant concentrations stable or decreasing.
- LUCs continued until regulatory requirements for unrestricted use met
  - Prevent access to and use of groundwater
  - Maintain classification exception area
  - Prohibit excavation without safeguards